UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
LAFORGIA, CHRISTIAN A

ART UNIT	PAPER NUMBER
2131	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/657,604	BRANDENBURG ET AL.
	Examiner	Art Unit	
	Christian La Forgia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _14 May 2007_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-37_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-37_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _22 March 2005_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 14 May 2007 has been entered.

2.   Claims 1-37 have been presented for examination.

Response to Arguments

3.   Applicant's arguments with respect to the 35 U.S.C. 101 rejection of claims 1-36 have

been considered but are moot in view of the new grounds of rejection.

4.   Applicant's arguments with respect to claims 1-37 have been considered but are moot in

view of the new ground(s) of rejection.

5.   See further rejections that follow.

Specification

6.   The specification is objected to as failing to provide proper antecedent basis for the

claimed subject matter of claims 1-36, specifically the computer-readable medium. By not

defining the term computer-readable medium, the Applicant has made it impossible to ascertain

the intended scope of claims 1-36. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is

required.

Claim Objections

7.   Claims 23 and 24 are objected to under 37 CFR 1.75(c), as being of improper dependent

form for failing to further limit the subject matter of a previous claim. Applicant is required to

cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the

claim in independent form.

Claim Rejections - 35 USC § 101

8.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

9.   Claims 1-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter. Claims 1-36 require a computer readable medium, which, as

noted above, has not been defined by the Specification. One of ordinary skill could reasonably

construe that the computer-readable medium includes transmission media and carrier waves

since the invention requires a transaction occurring on a network. The Office's current position

is that claims involving signals encoded with functional descriptive material do not fall within

any of the categories of patentable subject matter set forth in 35 U.S.C. § 101, and such claims

are therefore ineligible for patent protection. *See* 1300 OG 142 (November 22, 2005) (in

particular, see Annex IV(c)).

Claim Rejections - 35 USC § 103

10.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

11.   Claims 1-9, 23-25, 28, 29, and 31-34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent No. 6,072,870 to Nguyen et al., hereinafter Nguyen, in view of

U.S. Patent No. 6,327,578 to Linehan, hereinafter Linehan.

12.   As per claim 1, Nguyen teaches an apparatus for integrating a seller's Web site with a

public key infrastructure, wherein:

the public key infrastructure comprises a buyer computer (Figure 1C [block 186]) having

a Web browser (Figure 1C [block 141]) adapted to invoke an interface to authenticate electronic

messages (Figures 29, 33) and a seller's bank computer system (Figures 1B and 3 [block 140])

adapted to receive service requests from the seller and to respond to those requests (Figures 1B

[block 170], 3 [block 315]), and the seller's Web site comprises computer program instructions

encoded on at least one computer-readable medium comprising:

a filter adapted to redirect HTTP requests received from the Web browser (Figure 21A

[block 2102], column 70, lines 46-65);

coupled to the filter, an Internet server application adapted to receive a redirected HTTP

request and process the redirected HTTP requests (Figure 21B [block 2110], column 70, lines

46-65, column 71, lines 8-52);

coupled to the Internet server application, a filter engine adapted to receive processed

HTTP requests from the Internet server application (Figure 21B [block 2124], column 70, lines

46-65, column 71, lines 8-52) and to identify which HTTP requests require additional user

authentication information, such as usernames and passwords (column 16, lines 7-15).

13.   Nguyen does not disclose wherein the interface includes a place to include a digital

signature and wherein the authentication information includes digital signatures.

14.   Linehan teaches the use of digital signatures as authentication information (column 7,

lines 38-49).

15.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to replace the username and password authentication information with the digital

signature information disclosed by Linehan, since Linehan states at column 4, lines 5-9 that

providing alternate authentication mechanisms results in a significant reduction in complexity,

thereby improving the case of implementation and overall performance.

16.   Regarding claim 2, Nguyen discloses the filter engine is further adapted to identify HTTP

requests that require accessing a service offered by the seller's bank and to formulate requests for

the service (Figure 21A [block 2102], column 70, lines 46-65); and

        the seller's web site further comprises, coupled to the filter engine, a bank interface

adapted to receive request from the filter engine, reformat the requests, and transmit the request

to the seller's bank (Figure 3 [blocks 310, 315], column 15, lines 51-63).

17.   With regards to claim 3, Nguyen teaches wherein the bank interface is further adapted to

receive a service response to the request from the seller's bank and forward the response to the

filter engine (Figure 3 [blocks 325, 320], column 15, lines 51-63).

18.   With regards to claim 4, Nguyen discloses certificate validation (column 71, lines 8-52).

19.   Regarding claim 5, Nguyen teaches a Web server adapted to parse requests redirected by the filter (column 70, lines 46-65).

20.   Regarding claims 6 and 7, Linehan teaches wherein services provided by the seller's bank are provided within the context of a four-corner model (Figure 2A), and wherein the four-corner model comprises the buyer (Figure 2A [block 202]), the seller (Figure 2A [block 204]), the seller's bank (Figure 1A [block 208]), and a buyer's bank (Figure 2A [block 212]).

21.   Regarding claim 8, Nguyen discloses wherein the filter is implemented using ISAPI (column 12, lines 28-65).

22.   Regarding claim 9, Nguyen teaches wherein the Internet service application is adapted to generate HTTP responses based on data received from the filter engine (Figure 21B [block 2110], column 70, lines 46-65, column 71, lines 8-52).

23.   Regarding claim 23, Nguyen teaches wherein the filter engine determines whether an HTTP request contains data requiring authentication information, such as a username and password, by applying filtering rules (column 16, lines 7-15). Linehan teaches wherein the authentication information can be a buyer's digital signature.

24.   Regarding claim 24, Nguyen teaches wherein the filter engine is programmed to recognize each HTTP request that includes data requiring authentication information (column 16,

lines 7-15). Linehan teaches wherein the authentication information can be a buyer's digital signature.

25.   Regarding claim 25, Nguyen teaches wherein the filter engine is programmed to recognize HTTP requests transmitted by the Web browser that have been modified to include a special tag that indicates whether the request includes data that requires authentication information (column 16, lines 7-15). Linehan teaches wherein the authentication information can be a buyer's digital signature.

26.   Regarding claim 28, Nguyen teaches wherein the filter engine provides an abstracted front-end interface via an object oriented computer programming language remote method invocation (column 7, line 13 to column 8, line 8).

27.   Regarding claim 29, Nguyen teaches wherein the filter engine employs a rules class (column 9, line 66 to column 10, line 11).

28.   Regarding claim 31, Linehan teach wherein the bank interface is designed with a plug-in based architecture (column 9, line 3-28).

29.   Regarding claim 32, Linehan teaches wherein the bank interface supports an abstract front-end interface to allow communication via a plurality of middleware technologies (Figure 2A [block 206]).

30.   Regarding claims 33 and 34, Linehan teaches wherein the bank interface is adapted to

create and transmit OCSP requests or some time of a certificate status check module (column 3,

lines 25-47).

31.   As per claim 37, Nguyen teaches an apparatus for integrating a seller's Web site with a

public key infrastructure, said apparatus comprising:

        a Web server located at the seller's Web site (Figure 2 [block 130]);

        a Web application coupled to the Web server and also located at the seller's Web site, the

Web application adapted to:

        identify which HTTP requests from a buyer require a authentication information of the

buyer and which HTTP requests do not require authentication information of the buyer (column

16, lines 7-15);

        create a Web page for transmission to a browser controlled by the buyer said Web page

causing the browser to invoke an interface (Figures 29, 33) and comprising a smart card

containing a private key associated with the buyer (column 89, line 52 to column 90, line 2); and

        identify which HTTP requests require a service provided by an entity other than the seller

and which HTTP requests do not require a service provided by an entity other than the seller

(Figure 21B [block 2124], column 70, lines 46-65, column 71, lines 8-52); and

        coupled to the Web application and also located at the seller's Web site, an interface

module adapted to receive from the Web application requests for service from entities other than

the seller, to format and transmit the request, to receive a response to the request, and to forward

the response to the Web application (Figure 3 [blocks 310, 315, 325, 320], column 15, lines 51-63).

32.   Nguyen does not disclose wherein the interface includes a place to include a digital signature and wherein the authentication information includes digital signatures.

33.   Linehan teaches the use of digital signatures as authentication information (column 7, lines 38-49).

34.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the username and password authentication information with the digital signature information disclosed by Linehan, since Linehan states at column 4, lines 5-9 that providing alternate authentication mechanisms results in a significant reduction in complexity, thereby improving the case of implementation and overall performance.

35.   Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen in view of Linehan as applied above, and further in view of U.S. Patent No. 6,052,785 to Lin et al., hereinafter Lin.

36.   Regarding claim 10, Nguyen and Linehan do not teach wherein the Internet server application is adapted to pass a hash table to the filter engine.

37.   Lin teaches wherein the Internet server application is adapted to pass a hash table to the filter engine (Figure 3).

38.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the server application pass a hash table to the filter engine, since Lin states at

column 8, lines 43-56 that including a hash table supports the flexibility of authentication, which

aids in preventing fraudulent transactions.

39.   With regards to claims 11-16, Nguyen teaches wherein the hash table comprises the

headers from the redirected HTTP request, the method of the redirected HTTP request, the

content-type of the redirected HTTP request, the buyer computer's IP address, the actual data in

the redirected HTTP request, or a unique session ID (Figure 32, column 8, line 51 to column 9,

line 17).

Allowable Subject Matter

40.   Claims 17-22, 26, 27, 30, 35 and 36 would be allowable if rewritten or amended to

overcome the rejections under 35 U.S.C. 101, set forth in this Office action.

Conclusion

41.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

42.   The following patents are cited to further show the state of the art with respect to ***,

such as:

United States Patent No. 6,889,325 to Sipman et al., which is cited to show a method for

conducting a transaction that provides for an interface that requires a digital signature.

United States Patent No. 6,715,080 to Starkovich, which is cited to show making

variables obtained at a merchant's website available to a payment gateway.

United States Patent No. 5,706,427 to Tabuki, which is cited to show a online transaction

that requires a digital signature.

.   United States Patent No. 6,092,196 to Reiche, which is cited to show authenticating

HTTP requests for online transactions.

United States Patent No. 5,754,772 to Leaf, which is cited to show an HTTP server to

transaction gateway.

United States Patent No. 6,766,454 to Riggins, which is cited to show using an

authentication applet to identify and authenticate a user in a computer network.

43.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792.

The examiner can normally be reached on Monday thru Thursday 7-5.

44.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

45.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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